

**REMARKS/ARGUMENTS**

Claims 26-32 and 34 remain pending in the instant application. Claim 32 has been amended. Claim 33 has been canceled.

In response to objections raised by the Examiner, the drawings and the specification have now been amended in the manner indicated above. Specifically, drawing Figure 1 has been amended to add "Bioinformatics Database 102" and "Synthesis System 110", drawing Figure 2A has been amended to relabel the "SCSI HOST ADAPTER" from "230" to "236", and Figure 9F has been amended to correct the location of "input field 916", and to add "output field 918". In addition, Applicants note that in lieu of adding reference numbers 304 and 306 to the drawings, the specification has been amended to change reference to these numbers as 405, described elsewhere in the application as the "data mining information database". No new matter has been introduced by virtue of any of these amendments.

Embodiments in accordance with the present invention relate to methods and computer programs wherein a user is able to input information over a computer network to control parameters of an experiment to be conducted. Particular examples of interfaces for user input of experimental control information are described in the specification in connection with Figures 10D-F.

Fig. 10D illustrates fluidics station control screens 1031 and 1032 in a particular embodiment according to the present invention . . . . Fluidics control screens 1031 and 1032 can provide the user with the capability to control a fluidics station based upon selection of particular experiment names and protocols. The user can specify assay types, sample projects, reagents and protocols using the fluidics control screens.

Fig. 10E illustrates a scanner control screens 1041 and 1042 for controlling the scanning to a local drive or to a network in particular embodiment according to the present invention . . . . Scan control screens 1041 and 1042 provide the capability to the user to specify experiment name, probe array types, number of scans to be performed, assay-types, sample projects, experiments and a display of the scanned experiments.

Fig. 10F illustrates experiment information screens 1051 and 1052 in a particular embodiment according to the present invention. . . . Experiment information screens 1051 and 1052 provide the user with the capability to specify experiment names, probe array, probe array lots, operators, sample types, sample

descriptions, projects, comments, reagents and reagent lots. (Emphasis added;  
page 19, line 30 - page 20, line 13)

In accordance with this teaching of the specification, pending independent claims 26, 32, and 34 recite transferring information to control an experiment over a network:

26. A method for a user interface to accept laboratory experiment information for control of a laboratory experiment, the method using a computer system, the computer system including a processing system coupled to a network, wherein a user input device, display device and processor are coupled to the processing system, the method comprising  
accepting signals from the user input device to define a parameter of an experiment;  
transferring the parameter to the network;  
receiving experiment results from the network, wherein the experiment results include results from an experiment using the parameter; and  
displaying the experiment results on the display device. (Emphasis added)

32. A method for displaying laboratory experiment information, the method using a computer system, the computer system including a processing system coupled to a network, wherein a display device and processor are coupled to the processing system, the method comprising  
using the processor to display steps of setup and execution of an experiment over the network; and  
using the processor to display a result for a sample for one or more of the displayed steps. (Emphasis added)

34. A computer program embodied on a computer-readable medium for a method to accept laboratory experiment information, the method using a computer system, the computer system including a processing system coupled to a network, wherein a user input device, display device and processor are coupled to the processing system, the computer program including  
one or more instructions for accepting signals from the user input device to define a parameter of an experiment;  
one or more instructions for transferring the parameter to the network;  
one or more instructions for receiving experiment results from the network, wherein the experiment results include results from an experiment using the parameter; and  
displaying the experiment results on the display device. (Emphasis added)

The Examiner has rejected pending claims 26-34 as obvious under 35 U.S.C. 103 based upon U.S. patent no. 6,100,030 to McCasky Feazel et al. ("the McCasky Feasel patent"), considered in light of U.S. patent no. 6,355,423 to Rothberg et al. ("the Rothberg patent"). These claim rejections are traversed as follows.

The McCasky Feasel patent describes various experimental techniques relating to amplification of DNA fragments. However, as explicitly recognized by the Examiner, the McCasky Feasel patent fails to disclose conducting an experiment over a network. (Page 4, lines 13-15).

In an attempt to provide such a teaching, the Examiner has combined the McCasky Feasel patent with the Rothberg patent. In making this combination, the Examiner has cited the following a passage from the Rothberg patent:

this invention includes computer systems for performing such manipulations and comparisons on data previously stored on computer-readable storage media. Such systems include processing means for user requests and user input/output means for receiving requests and displaying processing responses. Processing means include programs for carrying out processing and analysis step 913, and in particular for carrying out the previously described user requests. These means also can access permanent storage systems 910 and computer-readable media 912, on which are recorded the results of gene-expression experiments performed according to this invention. (Emphasis added; col. 38, lines 56-67)

The "processing and analysis step 913" relates to manipulation of data already acquired by experimentation:

Additional processing of the stored results can be advantageous, and processing and analysis step 913 generally includes means for a user to request various such additional processing and comparing and to receive output from these requests. Such additional processing can include simply redisplay of previously stored data for later review. More importantly, the stored data can be combined for various comparative analyses. (Emphasis added; col. 37, lines 42-47)

As emphasized in the above-excerpted passages, the Rothberg patent is limited to describing using a network to access results of experiments that have already been conducted.

Appl. No. 09/397,494  
Amdt. dated July 28, 2003  
Reply to Office Action of March 28, 2003


PATENT

Nowhere, however, does the Rothberg patent contains a teaching or even a suggestion regarding use of a network to communicate parameters of an experiment that is to be conducted.

Because the claimed aspect of controlling an experiment over a network is neither taught nor suggested by the Rothberg patent, alone or in combination with the McKasky Feasel patent, it is respectfully suggested that the pending claims cannot be considered obvious in light of the references relied upon by the Examiner. Continued rejection of the pending claims is improper, and the obviousness rejections should be withdrawn.

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested. If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



Kent J. Tobin  
Reg. No. 39,496

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, 8<sup>th</sup> Floor  
San Francisco, California 94111-3834  
Tel: 650-326-2400  
Fax: 650-326-2422  
KJT:km  
23318812 v1